

- 65 -

We claim:

1. An isolated virus (RRV) as deposited with ATCC as deposit accession number VR-2601<sup>h</sup>.
- 5 2. A purified virus, having a nucleic acid sequence
  - (a) shown in SEQ ID NO 1; or
  - (b) a nucleic acid sequence having at least 80% sequence identity to the nucleic acid sequence shown in SEQ ID NO 1.
- 10 3. The purified virus of claim 2, wherein the nucleic acid sequence has at least 95% sequence identity to the nucleic acid sequence shown in SEQ ID NO 1.
4. A purified protein encoded by an open reading frame of the virus shown in SEQ ID NO 1.
5. A purified protein having a biological activity of an RRV protein, and comprising an amino acid sequence selected from the group consisting of:
  - 15 (a) an amino acid sequence shown in odd numbered sequences of SEQ ID NOS. 3-165;
  - (b) amino acid sequences that differ from those specified in (a) by one or more conservative amino acid substitutions; and
  - (c) amino acid sequences that have at least 80% sequence identity to the sequences  
20 specified in (a) or (b).
6. The purified protein of claim 5, wherein the amino acid sequence has at least 95% sequence identity to the sequences specified in 5(a) or 5(b).
7. The purified protein of claim 5, wherein the amino acid sequence is selected from odd numbered sequences within the group consisting of SEQ ID NOS 3-19 and 23-165.
- 25 8. An isolated nucleic acid molecule encoding a protein according to claim 5.
9. An isolated nucleic acid molecule according to claim 8, wherein the molecule comprises a sequence selected from the group consisting of even numbered sequences of SEQ ID NOS 2-164.
10. The isolated nucleic acid molecule according to claim 9, wherein the molecule  
30 comprises a sequence selected from the group consisting of even numbered sequences of SEQ ID NOS 2-18 and 22-164.
11. A recombinant nucleic acid molecule comprising a promoter sequence operably linked to a nucleic acid molecule according to claim 8.
12. A cell transformed with a recombinant nucleic acid molecule according to claim  
35 8.
13. A non-human mammal purposefully infected with the virus of claim 2.
14. The mammal of claim 13, wherein the mammal is a primate.

- 66 -

15. An oligonucleotide comprising a sequence selected from the group consisting of:
- (a) at least 20 contiguous nucleotides of the sequence shown in SEQ ID NO 1;
  - (b) at least 30 contiguous nucleotides of the sequence shown in SEQ ID NO 1; and
  - (c) at least 50 contiguous nucleotides of the sequence shown in SEQ ID NO 1.
- 5 16. An isolated nucleic acid molecule that:
- (a) hybridizes under stringent conditions with a nucleic acid probe comprising the sequence of claim 15; and
  - (b) encodes a protein having an RRV protein biological activity.
17. An isolated nucleic acid molecule encoding at least one RRV protein.
- 10 18. An isolated nucleic acid molecule encoding all RRV proteins, and having a biological activity of an RRV virus.
19. A method for testing the efficacy of a drug in the treatment of a condition associated with infection with RRV, the method comprising:
- (a) administering the drug to a non-human primate infected with an RRV; and
  - 15 (b) observing the primate to determine if the drug prevents or reduces the presentation of one or more symptoms associated with RRV infection.
20. The method of claim 19, wherein the primate is immunocompromised.
21. The method of claim 20, wherein the drug is for the treatment of Kaposi's sarcoma and lymphoproliferative disorders.
- 20 22. The method of claim 20 wherein the primate is immuno-compromised as a result of infection by Simian Immunodeficiency Virus (SIV).
23. The method of claim 19 wherein the condition associated with RRV infection is one or more of B-cell hyperplasia, lymphadenopathy, splenomegaly, hypergammaglobulinemia or autoimmune hemolytic anemia.
- 25 24. The method of claim 19 wherein the non-human primate is a Rhesus macaque monkey.
25. A method for producing a non-human primate model for testing potential treatments for a condition associated with RRV infection, comprising
- (a) administering a treatment to the primate to render the primate
  - 30 immunocompromised; and
  - (b) infecting the primate with a RRV.
26. The method of claim 25, wherein the condition is Kaposi's sarcoma and lymphoproliferative disorders.
27. The method of claim 25 wherein the treatment used to render the primate
- 35 immuno-compromised is infection with SIV.
28. The method of claim 25 wherein the non-human primate is a Rhesus macaque monkey.

- 67 -

29. A method for testing the efficacy of a candidate vaccine against RRV infection, or conditions associated with RRV infection, the method comprising:

- (a) administering the vaccine to a subject capable of infection with the RRV;
- (b) inoculating the subject with the RRV; and
- 5 (c) observing the subject to determine if the vaccine prevents or reduces an incidence of RRV infection or presentation of one or more conditions associated with RRV infection.

30. The method of claim 29, wherein the subject is a primate.

31. The method of claim 30, wherein the primate is a non-human primate.

10 32. The method of claim 29, wherein the primate is immunocompromised.

33. The method of claim 29, wherein the conditions associated with infection include B-cell hyperplasia, lymphadenopathy, splenomegaly, hypergammaglobulinemia or autoimmune hemolytic anemia.

15 34. The method of claim 31 wherein the non-human primate is a Rhesus macaque monkey.

20